

We claim:

- 1 1. A method of providing voice messaging services at a handheld computing device
2 comprising:
- 3 communicating with a voice messaging repository to receive a voice message at said
4 handheld computing device;
- 5 locally storing said received voice message; and
- 6 locally providing an interface to said user allowing said user to indicate an action to
7 perform on said received voice message.
- 1 2. The method of claim 1 further comprising:
- 2 receiving an indication of said action to perform on said received voice message;
3 and
4 responsive to receiving said indication, performing said action.
- 1 3. The method of claim 2 wherein said action is "play" and said performing said action
2 further comprises:
- 3 generating an audio signal from said received voice message; and
- 4 outputting said audio signal to an audio output device associated with said handheld
5 computing device.
- 1 4. The method of claim 2 wherein said action is "delete" and said performing said action
2 further comprises further communicating with said voice messaging repository to indicate a
3 deletion of said received voice message.
- 1 5. The method of claim 2 wherein said action is "forward" and said performing said action
2 further comprises:
- 3 receiving an indication of an intended recipient of said received voice message; and

4 further communicating with said voice messaging repository to transfer information
5 identifying said intended recipient.

1 6. The method of claim 5 wherein said information identifying said intended recipient is a
2 telephone number.

1 7. The method of claim 6 wherein said indication is a name and said method further
2 includes locally mapping said name to said telephone number.

1 8. The method of claim 1 further comprising:

2 extracting, from said received voice message, information related to said received
3 voice message; and

4 using said interface to present said information related to said received voice
5 message.

1 9. The method of claim 8 wherein said interface comprises a display for display of said
2 information related to said received voice message.

1 10. The method of claim 1 wherein said voice messaging repository is a desktop personal
2 computer and said communicating with said voice messaging repository occurs over a wired
3 connection.

1 11. The method of claim 1 wherein said voice messaging repository is a voice messaging
2 server and wherein said communicating with said voice messaging server occurs over a data
3 network.

1 12. The method of claim 11 further comprising establishing a connection to said data
2 network.

1 13. The method of claim 12 further comprising employing the Internet Protocol for said
2 communicating with said voice messaging server.

1 14. The method of claim 13 further comprising employing the Hyper-Text Transfer
2 protocol for said communicating with said voice messaging server.

1 15. The method of claim 1 wherein said voice messaging repository is a voice messaging
2 server and wherein said communicating with said voice messaging server occurs over a
3 public switched telephone network.

1 16. The method of claim 15 further comprising establishing a connection to said public
2 switched telephone network.

1 17. The method of claim 16 further comprising generating Dual Tone Multi-Frequency
2 tones for said communicating with said voice messaging server.

1 18. The method of claim 1 further comprising compressing said received voice message to
2 reduce memory required for voice message storage.

1 19. The method of claim 1 further comprising, before said communicating with said voice
2 messaging repository to receive said voice message, receiving an indication of arrival of a
3 voice message from said voice messaging repository.

1 20. The method of claim 19 wherein said indication of arrival includes details associated
2 with said received voice message.

1 21. The method of claim 1 wherein said communicating with said voice messaging
2 repository further comprises indicating to said voice messaging repository a status of voice
3 messages previously received at said handheld computing device.

1 22. The method of claim 21 wherein, for each of said previously received voice messages,
2 said status is one of unplayed, played, deleted, sent and unsent.

1 / 23. A handheld computing device comprising:

2 means for communicating with a voice messaging repository to receive a voice
3 message;

4 means for locally storing said received voice message; and

5 means for locally providing an interface to said user allowing said user to indicate
6 an action to perform on said received voice message.

1 / 24. A computer readable medium containing computer-executable instructions which, when
2 performed by a processor in a handheld computing device, cause the processor to:

3 communicate with a voice messaging repository to receive a voice message;

4 locally store said received voice message; and

5 locally provide an interface to said user allowing said user to indicate an action to
6 perform on said received voice message.

1 / 25. A method of creating a voice message at a handheld computing device comprising:

2 recording said voice message using audio recording capabilities of said handheld
3 computing device;

4 receiving, through a local interface, an indication of an intended recipient of said
5 voice message; and

6 communicating with a voice messaging repository to transfer said voice message in
7 association with information identifying said intended recipient.

1 / 26. A method of providing voice messaging services at a handheld computing device
2 comprising:

3 communicating with a voice messaging repository to receive, at said handheld
4 computing device, information regarding a voice message;

5 locally storing said received information;

6 locally providing an interface to said user, where said interface allows said user to
7 review said information and indicate an action to perform on said voice message;
8 and

9 transmitting, to said voice messaging repository, instructions to perform said action
10 on said voice message.